seedlings of the previous spring's sowing encounter the first prolonged hot spells of summer. At this time the disease usually attacks the petioles. This appears to be the period of greatest injury. The other period of special susceptibility is during the ripening of the seed, when the severest attacks are on the stems just at or slightly below the surface of the ground. Many flower heads are also killed about flowering time by attacks just below, but the host plant as a whole appears usually to survive. These statements are only general in character, however, for the plant may succumb to the disease at any time during the summer or early fall.

We have named the species Colletotrichum trifolii, and append the following description:

Colletotrichum trifolii Bain sp. nov.—Maculis atris vel fuscis, saepe depressis; acervulis erumpentibus, sparsis vel gregariis; basidiis hyalinis, cylindricis vel fusoideis, conidiis prope aequalibus; conidiis hyalinis, rectis, utrinque rotundatis, 3-4 x 11-13μ; setulis cum conidiis, continuis vel uniseptatis, paucis vel numerosis, fuligineis, ad apicem pallidioribus, 4-7 x 39-62μ, saepe sinuosis vel nodulosis.

Habitat in vivis caulibus et petiolis, rarissime in foliis Trifolii pratensis et Medicaginis sativae, Tennessee, Kentucky, Arkansas; Virginia (J. M. Westgate); West Virginia, Ohio (Yearbook U. S. Department of Agriculture, 1905, p. 609).

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TWO NEW SPECIES BELONGING TO NAUCORIA AND STROPHARIA.

GEO. F. ATKINSON.

Material received from Prof. W. A. Kellerman and Supt. M. E. Hard, Central Ohio, prove to be undescribed species of fungi. The diagnoses of these two forms are given below; the first is also illustrated by a half-tone from photograph made by the collector.

Naucoria paludosella Atkinson n. sp.

20076. Photographed Coll.

Growing on living sphagnum, other mosses and on rotten wood, Sphagnum moor, Buckeye Lake (Cranberry Island), Ohio, W. A. Kellerman 4464, Sept. 1905, and M. E. Hard and W. A. Kellerman, Oct. 1906. (4916, W. A. K.)

Plants 6-8 cm. high; pileus 2½-3 cm. broad; stems 3-4 mm. thick.

Pileus viscid when moist, convex to expanded, in age somewhat depressed, clay color, darker over center, often with appressed clay brown scales with a darker color.

Gills raw umber to Mars brown (R), emarginate, adnate, sometimes with a decurrent tooth, easily becoming free.

Cystidia on sides of gills none, edge of gills with large hyaline thin-walled cells, subventricose, sometimes nearly cylindrical, abruptly narrowed at each end with a slight sinus around the middle.

Spores subovate to subelliptical, subinequilateral, smooth, 7-9x4-5 μ, fuscous ferruginous, dull ochraceous under microscope.

Stem same color as pileus but paler, cartilaginous, floccose from loose threads or in some cases abundant threads over the surface, becoming hollow, base bulbous, the extreme base covered with whitish mycelium.

Veil rather thick, floccose, disappearing leaving remnants on stem and margin of pileus when fresh.

Stropharia hardii Atkinson n. sp.

20118. Photographed G. F. A.

Chillicothe, Ohio, received October 17, 1906, M. E. Hard No. 8.

Plant 10 cm. high; pileus 9 cm. broad; stem 1½ cm. thick.

Pileus pale bright ochraceous; gills brownish near Prout's brown (R); stem pale yellow tinge.

Pileus convex to expanded, thick at the center, thin toward the margin, smooth; flesh tinged yellow.

Gills subelliptical to subventricose behind, broadly emarginate, adnexed.

Basidia 4-spored.

Spores suboblong, smooth, 5-9x3-5 μ, purple brown under the microscope.

Cystidia not very numerous on sides of gills, varying from clavate to subventricose to sublanceolate, the free end more or less irregular when narrow, rarely branching below the apex and usually with a prominent broad apiculus or with two or several short processes. Similar cells on edge of gills, but somewhat smaller and more regular.

Stem even at the base, tapering to a short root, transversely floccose scaly both above and below the ring. The ring membraneous, not prominent but still evident, about 2 cm. from the apex.

EXPLANATION OF PLATE 91. — Photograph of fresh specimens of Naucoria paludosella Atkinson. Young specimens with the pileus unexpended to the left below; above older plants with upturned cap; the plant over the black background shows the conspicuous clay brown scales of the pileus.

NAUCORIA PALUDOSELLA ATKINSON.